Appln. No. 10/541,390 Response dated September 17, 2008 Reply to Office Action of March 17, 2008

## Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

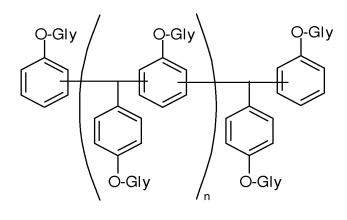
## CLAIMS:

- 1. (currently amended) A halogen-free ignition resistant polymer composition comprising:
  - A) a thermoplastic polymer or polymer blend, and
  - B) a modified multi-functional epoxy resin which is the reaction product of a multifunctional epoxy resin selected from the resins represented by the following structures:

$$\begin{array}{c|c}
O-CH_2-CH-CH_2 & O-CH_2-CH-CH_2 \\
R & R & R
\end{array}$$

wherein "R" is hydrogen,  $C_1$ - $C_3$  alkylhydroxy or a  $C_1$ - $C_3$  alkyl; and "n" is 0 or an integer from 1 to 10;

wherein Gly is a glycidyl group; and



with an epoxy modifier which will react with epoxy functionalities, which modifier is selected from the group consisting of phenolic compounds, polyisocyanates, acidic compounds, acid anhydrides, compounds containing an amino group, butadienes, and combinations of one or more of these modifiers; wherein the reaction product contains ing from 0 to less than 10 -20 wt. percent residual epoxy groups, based on the total weight of the epoxy resin, and

- C) a phosphorus containing compound.
- 2. (original) The halogen-free ignition resistant polymer composition of Claim 1, wherein A) is selected from the group consisting of: polymers produced from a vinyl aromatic monomer or hydrogenated versions thereof, polycarbonate, acrylonitrile-butadiene-styrene copolymer/polycarbonate compositions, hydroxy phenoxy ether polymers, polyphenylene ether polymers, polyethylene terephthalate, epoxy resins, ethylene vinyl alcohol copolymers, ethylene acrylic acid copolymers, polyolefin carbon monoxide interpolymers, polyolefins, cyclic olefin copolymers, olefin copolymers and homopolymers, polyphenylene oxide and any combination thereof.
- 3. (original) The halogen-free ignition resistant polymer composition of Claim 2, wherein A) is selected from the group consisting of: styrene-butadiene block copolymers, polystyrene, high impact polystyrene, acrylonitrile-butadiene-styrene copolymers, and styrene-acrylonitrile copolymers.
- 4. (original) The halogen-free ignition resistant polymer composition of Claim 1, wherein A) is from 40 to 94 weight percent; B) is from 1 to 30 weight percent; and C) is from 62897B

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5 to 30 weight percent of the total weight of the halogen-free ignition resistant polymer composition

- 5. Canceled
- 6. Canceled
- 7. (original) The halogen-free ignition resistant polymer composition of Claim 1 wherein the modified multi-functional epoxy resin is functionally modified with more than one modifier.
  - 8. Canceled
  - 9. Canceled
  - 10. Canceled
- 11. (currently amended) The halogen-free ignition resistant polymer composition of Claim 1 consisting essentially of:
  - A) from 40 to 94 weight percent, based on the total weight of the composition, of the a-thermoplastic polymer, optionally comprising 10-35 weight percent, based on the total weight of the composition, of a polyphenylene ether polymer;
  - B) from 1 to 30 weight percent, based on the total weight of the composition, of the a-modified multi-functional epoxy resin containing from 0 to 10-20 wt. percent, based on the total weight of the epoxy resin, residual epoxy groups; and
  - C) from 5 to 30 weight percent, based on the total weight of the composition, of the a-phosphorus compound such as an aryl phosphate.
- 12. (original) The halogen-free ignition resistant polymer composition of Claim 11, wherein the thermoplastic polymer of A) is selected from the group consisting of: a polymers produced from a vinyl aromatic monomer or hydrogenated versions thereof, polycarbonate, acrylonitrile-butadiene-styrene/polycarbonate compositions, polyphenylene ether resin, hydroxy phenoxy ether polymers, polyethylene terephthalate, epoxy resins, ethylene vinyl alcohol copolymers, ethylene acrylic acid copolymers, polyolefin carbon monoxide

interpolymers, polyolefins, cyclic olefin copolymers, olefin copolymers and homopolymers and any combination thereof.

- 13. (original) The halogen-free ignition resistant polymer composition of Claim 12, wherein the thermoplastic polymer of A) is selected from the group consisting of: styrene-butadiene block copolymers, polystyrene, high impact polystyrene, acrylonitrile-butadiene-styrene (ABS) copolymers, and styrene-acrylonitrile copolymers.
- 14. (original) The halogen-free ignition resistant polymer composition of Claim 11 wherein the modified multi-functional epoxy resin is a material produced from an epoxy resin which possesses, on average more than 1 epoxy group per molecule.
- 15. (original) The halogen-free ignition resistant polymer composition of Claim 11 wherein the modified multi-functional epoxy resin is a functionally modified with more than one modifier.
  - 16. Canceled
  - 17. Canceled
  - 18. Canceled
- 19. (previously presented) An article produced from the halogen-free ignition resistant polymer composition of Claim 1.
- 20. (previously presented) An article produced from the halogen-free ignition resistance polymer composition of Claim 18.
- 21. (new) The halogen-free ignition resistant polymer composition of Claim 1 wherein the epoxy modifier is selected from the group consisting of 2-phenylphenol, 4-phenylphenol, dimethyl phenol, tertial buthylphenol, bisphenol-a, bisphenol-f, methylene diphenyl diisocyanate, a toluenediisocyanate; salicylic acid, sulphanilamide, succinic acid anhydride, and dodecenylsuccinic anhydride.